

IN THE ABSTRACT:

Please replace the Abstract with the following amended abstract:

In a system, a server provides a digital signal processing function f to an executing device in an obfuscated form. The function f includes a function cascade of signal processing functions f_i , $1 \leq i \leq N$ (e.g., $FC_1(x) \equiv f_N \circ \dots \circ f_1(x)$). The server includes a processor for selecting a set of $2N$ invertible permutations p_i , $1 \leq i \leq 2N$; calculating a set of N functions g_i , where g_i is functionally equivalent to $p_{2i}^{-1} \circ f_i \circ p_{2i-1}$, for $1 \leq i \leq N$; and calculating a set of $N-1$ functions h_i , where h_i is functionally equivalent to $p_{2i-1}^{-1} \circ p_{2i-2}$, for $2 \leq i \leq N$. The server equips the executing device with an execution device function cascade that includes $y_N \circ h_N \circ y_{N-1} \circ h_{N-1} \circ \dots \circ y_1$, where y_1, \dots, y_N are function parameters (e.g., $ED_1(y_1, \dots, y_N) \equiv y_N \circ h_N \circ y_{N-1} \circ h_{N-1} \circ \dots \circ y_1$), and provides the functions g_1, \dots, g_N to the executing device. The executing device obtains the functions g_1, \dots, g_N and a processor for loading the execution device function cascade and applying the loaded execution device function cascade to the functions g_1, \dots, g_N (e.g., $ED_1(g_1, \dots, g_N)$).